

In the Claims:

Please amend claims 1-5, 9, 12, 13, and 43, and cancel claims 17-31, 34-42 and 44-83 as follows:

1. (currently amended) An isolated nucleic acid comprising SEQ ID NO:1 ~~encoding a fibroblast growth factor 23 (FGF23) wherein the polypeptide encoded by said nucleic acid has the ability to bind an FGF receptor and alter phosphate transport.~~

2. (currently amended) An isolated nucleic acid ~~encoding a fibroblast growth factor 23 (FGF23) wherein said isolated~~ comprising a sequence nucleic acid shares having at least 99% sequence identity with ~~the nucleic acid sequence of at least one of~~ SEQ ID NO:1, and wherein the polypeptide encoded by said nucleic acid has the ability to ~~bind an FGF receptor and alter~~ increase phosphate transport.

3. (currently amended) An isolated nucleic acid ~~encoding a fibroblast growth factor 23 (FGF23) wherein said isolated nucleic acid encodes~~ encoding a polypeptide having an ~~amino acid sequence that shares~~ at least 98% sequence identity with amino acid sequence of SEQ ID NO:2, wherein said polypeptide has the ability to ~~bind an FGF receptor and alter~~ increase phosphate transport.

4. (currently amended) An isolated FGF23 nucleic acid included in DSMZ Deposit No. DSM 13530, wherein said nucleic acid comprises SEQ ID NO:1 ~~the polypeptide encoded by said FGF23 nucleic acid has the ability to bind an FGF receptor and alter phosphate transport.~~

5. (currently amended) The isolated nucleic acid of claim 1, said isolated nucleic acid further comprising a nucleic acid encoding a tag polypeptide ~~covalently linked thereto.~~

6. (original) The isolated nucleic acid of claim 5, wherein said tag polypeptide is selected from the group consisting of a myc tag polypeptide, a glutathione-S-transferase tag polypeptide, a green fluorescent protein tag polypeptide, a myc-pyruvate kinase tag polypeptide,

a His6 tag polypeptide, an influenza virus hemagglutinin tag polypeptide, a flag tag polypeptide, and a maltose binding protein tag polypeptide.

7. (previously presented) The isolated nucleic acid of claim 1, said nucleic acid further comprising a promoter/regulatory sequence operably linked thereto.

8. (original) A vector comprising the isolated nucleic acid of claim 1.

9. (currently amended) The vector of claim 8, said vector further comprising a nucleic acid ~~specifying~~ comprising a promoter/regulatory sequence operably linked thereto.

10. (original) A recombinant cell comprising the isolated nucleic acid of claim 1.

11. (original) A recombinant cell comprising the vector of claim 8.

12. (currently amended) An isolated nucleic acid ~~complementary to a nucleic acid comprising~~ that is the complement of SEQ ID NO:1 encoding a fibroblast growth factor 23 (FGF23).

13. (currently amended) ~~The~~ An isolated nucleic acid ~~of claim 12, wherein said complementary nucleic acid shares at least 99% sequence identity with a nucleic acid complementary with a nucleic acid having the sequence of at least one~~ which is 99% identical to the complement of SEQ ID NO:1.

14. (original) A vector comprising the isolated nucleic acid of claim 12.

15. (previously presented) The vector of claim 14, said vector further comprising a promoter/regulatory sequence operably linked thereto.

16. (original) A recombinant cell comprising the isolated nucleic acid of claim 12.

17. – 31. (canceled)

32. (original) A composition comprising the isolated nucleic acid of claim 1 and a pharmaceutically-acceptable carrier.

33. (original) A composition comprising the isolated nucleic acid of claim 12 and a pharmaceutically-acceptable carrier.

34. – 42. (canceled)

43. (currently amended) A method of making an isolated protein ~~having the ability to bind an FGF receptor and alter phosphate transport~~, said method comprising (a) culturing the recombinant cell of claim 11 under conditions such that said protein is expressed; and (b) recovering said protein.

44. – 83. (canceled)